

NAVAL WAR COLLEGE
Newport, R.I.

**Space Organization for Joint Warfighters
Should Space be Declared an Area of Responsibility?**

By

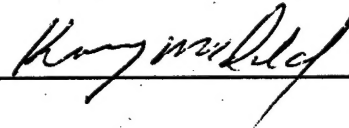
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A paper submitted to the faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Table of Contents

<u>Section</u>	<u>Page</u>
Table of Contents	ii
Abstract	iii
I Introduction	1
II Background	2
III USCINCSpace's Responsibilities	5
IV Characteristics of an AOR	7
V Why Declare Space an AOR?	9
VI U.S. National Policy for Space	14
VII Epilogue	16
Notes	18
Bibliography	21

Abstract

Space is truly the next frontier for the United States and other technology-dependent nations. With the increasing investment in space systems by both the military and commercial sectors, space is rapidly becoming a vital national interest to the U.S. Protecting that infrastructure will eventually become critical to the national security of our nation as this emerging technology becomes integrated into every facet of our society. USCINCSpace maintains that space must be declared an Area of Responsibility (AOR) to allow him to protect U.S. space lines of communications (Splocs) and fulfill his other Presidentially-directed responsibilities.

Using a systematic approach, this paper argues that Title 10 of the U.S. Code and the most recent revision to the Unified Command Plan give the CINC adequate authority to accomplish his assigned mission. Declaring space an AOR would add little military value to the warfighter in the near term. The downside of such a declaration, however, could be detrimental to the national security of the United States.

While the U.S. is working diligently to achieve strategic stability with Russia in this post-cold war world, designating space an AOR could send the message that the U.S. intends to militarize space. The Russians, subsequently, would have little incentive to ratify START III and to reduce their nuclear arsenal to "safe" levels. Therefore, the unintended consequence of declaring space an AOR could be the resumption of the nuclear arms race characteristic of the cold-war era.

I. Introduction

USCINCSpace believes it is time to formally declare space his Area of Responsibility (AOR). Such a declaration, he argues, is necessary for him to execute his Presidentially-directed mission as a Unified Commander. It must be done now because of the increased threat to U.S. assets in space and the proliferation of spaced-based capabilities that have occurred since U.S. Space Command was initially established in 1985. Moreover, since every facet of our society is becoming increasingly dependent on space functions, space must be designated an AOR to adequately protect these national assets which are vital to our nation's economic and military strength. Finally, declaring space an AOR is essential for USCINCSpace to provide more effective support to other warfighting CINCs by integrating military space capabilities into a total force package.¹

While numerous articles and papers have been written by space advocates on the benefits of defining space for the warfighter, few, if any, have investigated the near-term implications to U.S. national interests. This paper will take a balanced approach on the issue. In the end, it will show that USCINCSpace has sufficient authority in the foreseeable future to accomplish his Presidentially-directed mission without declaring space an AOR and that "militarization" of space could derail current U.S. efforts to negotiate the next round of arms control agreements with Russia.²

The following methodology was used in the analysis of this issue.

- First, this study provides background and traces the evolution of the current space environment.

- Next, it examines the warfighting mission assigned to USCINCSpace.
- Third, this paper defines and describes an AOR.
- Next, it critically examines USCINCSpace's specific rationale for declaring space an AOR.³
- Fifth, it highlights U.S. legal commitments in outer space and addresses conflicts that declaring space an AOR could have with current U.S. national strategy.
- In the epilogue, this paper examines the future development of space and defines the conditions in which it should be designated an AOR.

II. Background

Since October 4, 1957, when the Soviet Union launched a 184-pound polished ball named Sputnik 1 into orbit around the earth, the United States has been engaged in a race-to-space. The launching of this modest satellite was considered by many Americans to be the technological equivalent of Pearl Harbor.⁴ As a result, Americans became driven in their quest to regain parity with the Russians.

From the very beginning of the space program, the U.S. did not have a systematic approach to provide long-term guidance and direction for this endeavor. Consequently, few initiatives were coordinated between military and civilian agencies. There were many reasons for this lack of cooperation.

First, the Department of Defense had a penchant for classifying almost anything connected to the military.⁵ The high-level compartmentalization of the military space program resulted in many "stove-piped" programs that duplicated capabilities not only of the civilian

sector, but also of the other services as well. This practice of developing redundant capabilities was accepted when defense budgets were high and the nation was focused on the evil empire, but it is now irresponsible in this post-cold war joint environment.

Since President Eisenhower wanted the U.S. space program to reflect the values of a free and open society, he established NASA on October 1, 1958 to develop space for peaceful purposes.⁶ As a result, NASA's mission centered on developing weather and communication satellite capabilities and managing the manned space program while the military focused on developing reconnaissance satellites to monitor the arms race with the Soviet Union.⁷

With the collapse of communism, the United States placed less emphasis on the nuclear mission at the high end of the conflict spectrum and began to focus on Military Operations Other Than War (MOOTW) at the low end. The decline of the nuclear mission coupled with the shrinking defense budget resulted in an increased reliance on commercial space-based systems. As a result, the success of military operations began to depend on integrating commercial or dual-use communication, reconnaissance, and navigational satellites into a CINC's operational plan. The United States' heavy use of commercial and military space-based assets to support operational forces during Desert Storm highlights this trend.

The Goldwater-Nichols Defense Reorganization Act fundamentally changed the focus of the Department of Defense by increasing the CINC's authority to plan and employ forces for joint operations.⁸ Prior to this act, combatant commanders lacked the authority to influence the resource decisions of the services and were expected to fight and win with the independent land, sea, and air forces provided to them. DOD has now institutionalized a system that ensures defense allocation decisions, to at least some degree, reflect the requirements of the CINCs.⁹ Services must now build on their institutional strengths or core

competencies to exploit their expertise. In a recent speech at Maxwell AFB, General Fogelman characterized the service responsibilities best when he said, "We owe it to the taxpayers to push the envelope of air and space employment to seek warfighting advantages that save lives and resources. We are the nation's premier advocate for extracting every ounce of advantage from operating in the medium of air and space."¹⁰ Additionally, to increase interoperability and reduce redundancies, the services are also tasked by Goldwater-Nichols to cooperate and coordinate between the other military departments and agencies of DOD.

U.S. Space Command (USSPACECOM) was activated on September 23, 1985 to consolidate all military space activities under the direction of one Commander-in Chief (CINC) directly responsible to the National Command Authority through the Chairman, Joint Chiefs of Staff.¹¹ USSPACECOM is organized around three service component commands.

The Air Force Space Command (AFSPC), located at Peterson AFB, Co., is responsible for managing the majority of the space-related infrastructure for the Department of Defense and for the operation of all national space assets with the exception of those supporting the intelligence community.¹² Specifically, AFSPC is responsible for the "operation of military space systems, groundbased missile-warning radars and sensors, missile-warning satellites, and national launch centers and ranges".¹³ They are also responsible for operating and maintaining the nation's Intercontinental Ballistic Missile (ICBM) force.

The Army Space Command (ARSPACE), also located in Colorado Springs, Co., is responsible for providing input for DOD space plans, managing joint tactical uses of the Defense Satellite Communications System (DSCS), conducting planning for national and theater missile defense, operating the Army Theater Missile Defense Element force projection Tactical Operations Center, exploiting leading-edge space technologies in support of

warfighting needs, managing the Army Astronaut Program, and operating the Joint Tactical Ground Station.¹⁴ Perhaps most important, ARSPACE is the proponent and integrator for all Army efforts in space.¹⁵ This is a role that will certainly increase in importance in the next century.

The Naval component to USSPACECOM is the Naval Space Command (NAVSPACECOM) located in Dahlgren, Va. It is responsible for "operating assigned space systems for surveillance and warning; providing spacecraft telemetry and on-orbit engineering; developing space plans, programs, concepts and doctrine; and advocating naval warfighting requirements in the Joint arena."¹⁶

The bottom line is that in the current environment, characterized by a decrease in defense spending and an increase in low intensity conflicts, the CINCs and services must exploit commercial, civil, and military space assets to achieve military and national objectives. The Commission on Roles and Missions of the Armed Forces (CORM) recently suggested that "an integrated space program, using the best practices of the NRO [National Reconnaissance Office], the services, and the civil and commercial sectors, would result in lower acquisition and operational costs for space systems and improved responsiveness to all users of space systems."¹⁷

III. USCINCSpace's Responsibilities

In the most recent Unified Command Plan (UCP) signed by President Clinton on January 29, 1998, USCINCSpace's assigned mission responsibilities include:¹⁸

1. Providing missile warning and space surveillance to the North American Air Defense Command (NORAD).
2. Exercising Combatant Command over assigned U.S. forces that provide warning of missile attack and warning and assessment of space attack.
3. Advocating space requirements for CINCs.
4. Conducting space operations.
5. Planning and developing requirements for strategic ballistic missile defense and space-based support for tactical ballistic missile defense.
6. Providing integrated tactical warning and attack assessment of space, missile, and air attacks.
7. Serving as the single point of contact for military space operational matters.
8. Providing military representation to U.S. national agencies, commercial, and international agencies for matters related to military space operations.
9. Planning and implementing security assistance relating to military space operations and providing military assessments as required.
10. Coordinating and conducting space campaign planning.
11. Providing the military point of contact for countering the proliferation of weapons of mass destruction in space.

Title 10 of the US Code directs USCINCSpace to perform the mission assigned to him by the National Command Authority.¹⁹ It also gives the Secretary of Defense the responsibility to ensure that CINCs have sufficient "authority, direction, and control over the commands and forces assigned to the command to exercise effective command over those commands and forces."²⁰ Further, it ensures that the communication loop is complete by

directing CINCs to inform the SECDEF if they believe they don't have the authority, direction, or control to execute their assigned mission. To facilitate integrating a CINC's operational plan into the U.S. National Military Strategy, Title 10 gives them authority to communicate throughout DOD on any matter for which they have been assigned responsibility.²¹ The intent of Congress by passing this legislation was to give CINCs authority to achieve unity of effort within DOD in support of their assigned mission.

IV. Characteristics of an AOR

Before we examine the reasons that USCINCSpace cites for declaring space an AOR, we must clarify the term. According to Joint Pub 0-2, Unified Action Armed Forces, an area of responsibility is a "geographic area associated with a combatant command within which a combatant commander has authority to plan and conduct operations."²² Currently the United States divides the world into five geographic areas which are commanded by unified CINCs. The only areas of the world not assigned are the United States, Canada, Mexico, the Caspian Sea, Antarctica, and the states of the Former Soviet Union. These areas, however, will be assigned to a combatant commander as the situation dictates.²³

Geographic CINCs are given the responsibility to act as the single point of contact on all military matters within their assigned AOR. Since they have the responsibility to orchestrate forces from all services in their assigned region to achieve unity of effort, all AORs are bounded by air and sea. To be successful, the CORM suggests that CINCs must select from an assortment of service-specific capabilities and shape them into a unified force. Each service provides core competencies essential to the accomplishment of the mission assigned to

the CINCs. It is these unique core competencies that form the foundation of the warfighter's capabilities.

Professor Vego at the Naval War College describes two types of theaters based on predominate features of the physical environment.²⁴ The first type is a continental theater which consists mostly of a large land area and its associated airspace. The second type is a maritime theater which can encompass an entire ocean or sea including the adjacent littoral areas, islands, and the associated airspace.²⁵

The key point Professor Vego makes is that theaters are inherently joint because all services will normally be integrated in the military operation. Since space is not bounded by either land or sea, a space theater would not be inherently joint, but would support operations in one medium--space.

Theaters of war and theaters of operation can be further divided based on geographic features of the area. Professor Vego further subdivides a theater of operation into three areas of operation (AOO)--land, sea, and air. Since major operations can be conducted in space in support of a terrestrial theater of operation, it is now appropriate to include space as the fourth area of operation, equal to land, sea, and air.

Besides being a unique AOO, space is different from a geographic AOR because space control, like air superiority, will not guarantee the accomplishment of the military objective. The key center of gravity still remains the physical objective on the surface of the maritime or continental theater of operation. Lt Gen Edward G. Anderson III, USA, Commander of the U.S. Army Space and Missile Defense Command clearly articulates this point. "However distant their locus is from the surface of the earth, the success or failure of future space

operations must ultimately be measured on the surface.”²⁶ Space operations, like airpower, must always support objectives grounded in a terrestrial AOR.

V. Why Declare Space an AOR?

The primary reason for designating space an AOR, according to USCINCSpace is to “plan, prepare, conduct operations and employ forces to accomplish assigned and Presidentially authorized UCP warfighting responsibilities/missions in a Presidentially authorized, defined, assigned, location.”²⁷ He argues that because space is not defined as his AOR, he does not have the authority to carry out his responsibilities. Let’s examine this authority/responsibility mismatch. First, USCINCSpace has the direction and authority of two branches of government to execute his mission. The President assigns him specific responsibilities and Congress, in Title 10, directs him to perform that mission.

USCINCSpace is obligated under Title 10 to inform his boss, the SECDEF, if he is unable to perform his Presidentially-assigned duties. Since the recently released UCP did not define space as an AOR, we must assume that SECDEF does not believe the space-AOR issue is a show stopper in the near term.

Second, USCINCSpace believes that declaring space as his “Presidentially authorized location” is necessary for him to fulfill his duties. As a functional CINC, USCINCSpace is directed to accomplish his mission on a global basis. By definition, functional CINCs have global responsibilities that are not confined to a specific region. Therefore, USCINCSpace is assigned the mission to serve as the “single point of contact for military space operational matters” anywhere on or above the planet that execution of those responsibilities may

require.²⁸ Although the boundary between air and space is not clearly defined, most experts assume those duties will be performed 100 miles or more above the surface of the earth.²⁹

USSPACECOM also argues that space should be designated a regional AOR because functional CINCs “support specific military missions rather than performing operational missions in a single geographic region.”³⁰ He further maintains that “functional CINCs employ and command combat forces in regional CINCs AORs as supporting CINCs, under the control of a regional CINC.”³¹ This is a true statement, but provides only half of the picture. As a functional commander with no AOR, USCINCSpace can function as both a supported and supporting commander and can operate on a global basis or in support of operations in a specific area. Being a functional CINC does not limit USCINCSpace’s options to execute his mission. For example, USCINSTRAT, a functional CINC, clearly can execute his offensive mission anywhere on the globe. USCINTRANS, USCINCPAC, USCINACOM, and USCINCSpace are supporting CINCs to USCINSTRAT when the Single Integrated Operations Plan (SIOP) is executed. Conversely, when a theater nuclear option is planned and executed, USCINSTRAT is a supporting CINC for that operation.

USCINCSpace maintains that declaration of space as an AOR would “allow more effective support to the warfighter and integration of military space capabilities into [a] total force package.”³²

The UCP assigns USCINCSpace the responsibility to coordinate and conduct campaign planning. According to Joint Pub 3-0, a campaign is the “synchronization of air, land, sea, space, and special operations--as well as interagency and multinational operations--in harmony with diplomatic, economic, and informational efforts to attain national and multinational objectives.”³³ Being tasked to conduct space campaign planning gives

USCINCSpace the responsibility to integrate all elements of national power to achieve the national objective(s).

Further, being the single focal point for all space operations, USCINCSpace is the joint force coordinator for all U.S. military space forces. To accomplish this responsibility, Title 10 gives him the authority to communicate with other elements of DOD to integrate all Defense Department resources.

As the space advocate for the CINCs, USCINCSpace prioritizes their space requirements in his integrated priority list and submits them as part of the Joint Requirements Oversight Council (JROC) process. These joint requirements are reviewed and validated with the goal of supporting the warfighting CINCs.³⁴

USCINCSpace further states that designating space an AOR will facilitate "development of space doctrine, strategy, and tactics and clarify relationships with other CINCs to ensure seamless operations before we actually have to fight."³⁵ Although the warfighting CINCs participate in the formulation of doctrine, it is not a CINC responsibility. The services base doctrine on their functional expertise and experience on how to best employ forces to exploit their unique medium of operation.³⁶ The Air Force is presently writing doctrine for space operations. Air Force Doctrine Document 2-2, when published, will "outline the fundamental principles and basic doctrine for space operations. It [will] provide doctrine for the Air Force to organize, train, equip, and operate space forces."³⁷

Since the fundamental purpose of Goldwater-Nichols was to strengthen the concept of jointness, the Chairman of the Joint Chiefs was given the responsibility in Title 10 to "develop doctrine for the joint employment of the armed forces."³⁸ The intent of Congress was to integrate the relevant capabilities of all services to accomplish a specific objective. Space, like

the aerospace environment, does not need to be declared an AOR to advance our thinking on how to plan and execute forces for joint space operations. The Joint Staff has taken the lead in the area of joint space doctrine and is in the process of developing Joint Publication 3-14, Space Operations. USSPACECOM is also furthering the body of joint doctrine by proposing new responsibilities for the Joint Force Air Component Commander or JFACC. To ensure a seamless transition between air and space when conducting military operations, USSPACECOM proposes that the JFACC be responsible for both air and space functions. To orchestrate these activities for a supported CINC or Joint Task Force Commander, they recommend that the Joint Air Operations Center become the Joint Air and Space Operations Center and that it be staffed by experts from both the air and space community.³⁹

Another point that USCINCSpace makes is that declaring space an AOR would clarify relationships with other CINCs.⁴⁰ Command relationships should not be based on geographic boundaries, but on the best way to achieve unity of command to accomplish the mission. As a functional commander, USCINCSpace has the responsibility under Title 10 to "prescribe the chain of command to the commands and forces within that command" and to "organize commands and forces within that command as he considers necessary to carry out missions assigned to the command."⁴¹ More fundamentally, the principles of war that form the foundation of U.S. doctrine demand that commanders cooperate and coordinate to ensure that all forces work toward achieving the common objective.⁴² Declaring space an AOR is not a prerequisite to achieving unity of command.

Finally, designating space an AOR, USCINCSpace argues, would grant him "the authority to influence and shape the region of space through the global community of space-faring nations."⁴³

Shaping an AOR is one of the most important responsibilities of a geographic CINC. Getting your enemy to do your will without fighting is the essence of Sun Tzu's strategy. USCINCSpace's challenge, therefore, is to develop a coherent strategy that will transform space into a strategic environment that supports U.S. national interests. Designating space an AOR is not necessary for USCINCSpace to influence the development of the region since the President specifically tasked him to perform three shaping functions.

First, as the single point of contact for military space operational matters, USCINCSpace has the responsibility to be the functional expert on all developments and activities that occur or could occur in space just as geographic CINCs must thoroughly understand the history and dynamics of their AORs.

To increase our knowledge and understanding of the other 45 nations with space programs, USCINCSpace should develop military-to-military exchange programs similar to those established under the umbrella of the Nunn-Lugar Cooperative Threat Reduction Program between the U.S. and the states of the Former Soviet Union.⁴⁴

Without an AOR, USCINCSpace has set-up a model program between members of USSTRATCOM and their counterparts assigned to the Russian Rocket Forces. By personalizing the relationships, this military-to-military exchange resulted in an increased understanding of our Russian counterparts. A similar program should be developed to establish contacts with all space-faring nations.

Second, USCINCSpace is tasked to serve as the U.S. military representative to international, U.S. national, and commercial agencies for all matters that are related to space operations.⁴⁵ Like his regional counterpart, he has the authority to provide military advice to these agencies to coordinate their efforts to support our national goals. This responsibility to

coordinate with these agencies is one of his most important functions as a CINC. Since our reliance on commercial space systems is increasing exponentially, USCINCSpace must ensure that the U.S. military continues to have access to "leading-edge" systems of the U.S. military, our allies, and private corporations, as well.

Third, USCINCSpace is the designated military representative responsible for coordinating and advising Chiefs of U.S. Diplomatic Missions on all security assistance matters relating to military space operations.⁴⁶ He has the responsibility to advise our State Department diplomats on the military implications of specific government-to-government security assistance agreements such as those relating to his space control and force enhancement missions. Since the laws governing the military use of space are lagging years behind the development of new space technology, USCINCSpace's advice on future space treaties will be vital to our national security.

VI. U.S. National Policy for Space

It is clear that space does not need to be declared an AOR to allow USCINCSpace to accomplish his military mission. In the recent revision to the Unified Command Plan, the President gave him adequate authority to fully execute his responsibilities.

Although the declaration of space as an AOR would add little military value from a warfighter's perspective in the near term, the negative implications would far outweigh any benefits that would be gained.

First, it would send the message that the U.S. will militarize space. Like Antarctica, space has traditionally been considered a non-militarized region.⁴⁷ The Treaty on Principles

Governing the Activities of States in the Exploration and Use of Outer Space, which was signed by the U.S. and entered into force on October 10, 1967, recognizes the use of outer space only for peaceful purposes and for the benefit of all peoples.⁴⁸ Declaring space an AOR may contradict this international legal principle that considers space a "sanctuary" from militarization.⁴⁹

Second, while no treaty specifically prohibits the use of conventional weapons in space, it could send the wrong message at the wrong time.⁵⁰ One of our primary objectives outlined in the President's National Security Strategy is to enhance global security by reducing the number of nuclear warheads and their associated launchers.⁵¹ To that end, President Clinton has agreed to the START III guidelines that will limit the number of deployed nuclear warheads to 2000-2500. The President also reaffirmed his commitment to the Anti-Ballistic Missile (ABM) Treaty at Helsinki.⁵²

Since the reduction of strategic nuclear warheads will enhance strategic stability between the U.S. and Russia, we must do everything we can to encourage the Russian Duma to ratify START II and to continue down the path to further reductions. Our national security demands this course of action.

However, the U.S. is sending mixed signals to the Duma. Although the deployment of an operational ABM system would violate the 1972 U.S.-Russian Treaty, research and development of these banned systems is allowed under the agreement.⁵³ Consequently, the U.S. "has approved funding for the development of a prototype laser designed to shoot down missiles from space."⁵⁴

Declaring space an AOR could send the message to the Russians that the U.S. intends to field a robust National Missile Defense System that could render their reduced START III

nuclear force impotent. As a result, the Russians would have little incentive to ratify START III and to further reduce their nuclear arsenal, thus continuing the nuclear arms race characteristic of the cold-war era.

Declaring space an AOR and sending a message that the U.S. may militarize space is not worth the marginal benefits that may be gained. Space is simply another medium in which military operations can occur. "In the end, war still must be won by bringing the enemy to battle on ground he has no choice but to defend, imposing direct and continuing control over the land, people, and resources that sustain his capacity to resist and will to fight."⁵⁵

VII. Epilogue

The debate on declaring space as a separate AOR has been a part of the recent review of the Unified Command Plan. Such a review was healthy for the nation because it encouraged innovative, out-of-the-box thinking on how to organize space forces to achieve U.S. military objectives. However, since all elements of national power converge at the national-strategic level, one can not consider the military instrument independent of the political and economic environment. When all factors are considered, the time is not right to declare space an AOR. However, as space continues to mature due to advances in technology and increasing commercial and military investments in space-based systems, the U.S. should continue to examine all dimensions of this important issue.

In the final analysis, space should be declared an AOR only when two conditions are satisfied. First, U.S. space lines of communications must become a critical center of gravity for the nation. This will occur when space systems are woven into the very fabric of our society

and into all elements of our national power. Second, the United States must develop and deploy the capability to fight "in space, from space, and into space" to protect our vital interests in this region.⁵⁶ Only when U.S. space-based weapons can become a decisive factor in war, should space be declared an AOR equivalent to the current five terrestrial-based areas of responsibility.

Notes

1. Roger B. Graves, "Why Establish a Space Area of Responsibility (AOR) Now," (Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997), 1.
2. For the purposes of this paper, I defined "foreseeable future" as the time period out to the year 2010.
3. USCINCSpace's specific positions were articulated in the unpublished point papers of Col Roger Graves, LTC Rudy Veit, and LCDR Mark Rich from the United States Space Command and in Howell M. Estes III, "Space as an AOR," (Unpublished Briefing with notes, USSPACECOM, Colorado Springs, CO: 1997), 1-29. Many thanks to LCDR Tom Egbert from the USSPACECOM staff for providing this valuable information.
4. William E. Burrows, Deep Black: The Startling Truth Behind America's Top-Secret Spy Satellites (New York: Berkley 1986), 88.
5. Ibid., xii.
6. Walter A. McDougall, ...The Heavens and The Earth - A Political History of the Space Age (New York: Basic Books 1985), 176-209.
7. For a complete unclassified discussion of the development of the nation's reconnaissance program see Burrows, 1-379.
8. John P. White, "Defense Organization Today," Joint Forces Quarterly, Autumn 1996, 19.
9. Ibid.
10. Ibid.
11. RAND, Space Roles, Missions, and Functions: The Challenge of Organizational Reform, pm-382-CRMAF, 36.
12. Ibid., 40.
13. Tamar A. Mehuron, "Space Almanac," Air Force Magazine, August 1997, 34.
14. Ibid.
15. Edward G. Anderson III, "Exploiting the Global Reach of Space," Army, December 1997, 12.
16. Mehuron, 34.
17. Department of Defense, Report of the Commission on Roles and Missions of the Armed Forces (CORM) (Washington D. C.: 1995), 2-7.

18. For a complete description of USCINCSpace's responsibilities see Joint Chiefs of Staff, Unified Command Plan (UCP), Washington, D. C.: February 9, 1998), 12-15.
19. General Military Law, U.S. Code, Title 10—Armed Forces, secs. 164 (1994).
20. Ibid.
21. Ibid.
22. Joint Chiefs of Staff, Unified Action Armed Forces (UNAAF) (Joint Pub 0-2) (Washington, D. C.: February 24, 1995), GL-3.
23. UCP, 6.
24. Milan Vego, On Operational Art (2nd Draft) (Newport, RI: 1998), 74.
25. Ibid.
26. Edward G. Anderson III, "The New High Ground," Armed Forces Journal International, October 1997, 66.
27. Roger B. Graves, "The Concept of AORs and How AORs Relate to Space," (Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997), 1.
28. UCP, 14.
29. To avoid a turf battle similar to the conflicts created when the Air Force spun off from the Army in 1947, USSPACECOM wants to avoid a precise definition that divides air and space. For more information see, William B. Scott, "Pentagon Considers Space as a New Area of Responsibility," Aviation Week and Space Technology, March 24, 1997, 55.
30. Rudy Veit, "The Responsibilities of Regional and Functional CINCs," (Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997), 1.
31. Ibid.
32. Graves, "Why Establish a Space Area of Responsibility (AOR) Now," 1.
33. Joint Chiefs of Staff, Doctrine for Joint Operations (Joint Pub 3-0) (Washington, D. C.: February 1, 1995), III-5.
34. White, 21.
35. Graves, "Why Establish a Space Area of Responsibility (AOR) Now," 1.
36. White, 20.
37. United States Air Force, Space Operations (Air Force Doctrine Document 2-2) (Washington, D. C.: March 1998), 7.

38. U. S. Code, Title 10, secs. 153.
39. Roger B. Graves, "Why Establishing an AOR for USCINCSpace Does Not Create a Seam Between Air and Space," (Unpublished Point Paper, USSPACECOM, Colorado Springs, CO.: 1997), 1.
40. Graves, "Why Establish A Space Area of Responsibility (AOR) Now," 1.
41. U. S. Code, Title 10, secs. 164.
42. Joint Chiefs of Staff, Doctrine for Joint Operations (Joint Pub 3-0) (Washington, D. C.: February 1, 1995), A-2.
43. Mark Rich, "The Effect of a 6th AOR on Relationships and Responsibilities Among Regional CINCs," (Unpublished Point Paper, USSPACECOM, Colorado Springs, CO.: 1997), 1.
44. Ibid.
45. UCP, 14.
46. Ibid.
47. Richard H. Moyer, "Space as an Area of Responsibility (AOR)," (Unpublished Point Paper, USSTRATCOM, Omaha, NE.: 1997), 1.
48. "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies," 10 October 1967, United States Treaties and Other International Agreements, TIAS 6347 (1967) v. 18, pt.3, 2410-2421.
49. Moyer, 2.
50. The Outer Space Treaty of 1967 does specifically prohibit the employment of nuclear weapons or other weapons of mass destruction from outer space.
51. President, A National Security Strategy for a New Century (May 1997), 7.
52. Ibid.
53. Warren Ferster, "U. S. Space Priorities Unveiled: Military Plan Could Require National Policy, Treaty Changes," Space News, April 13-19, 1998, 20.
54. Ibid.
55. Anderson, "The New High Ground," 70.
56. Steven Lambakis, "Exploiting Space Control: It's Time to More Fully Integrate Space into Warfighting Operations," Armed Forces Journal International, June 1997, 42.

Bibliography

- Anderson, Edward G. "Exploiting the Global Reach of Space." Army, December 1997, 12.
- Anderson, Edward G. "The New High Ground." Armed Forces Journal International, October 1997, 66.
- Burrows, William E. Deep Black: The Startling Truth Behind America's Top-Secret Spy Satellites. New York: Berkley, 1986.
- Estes, Howell M. "Space as an AOR." Unpublished Briefing, USSPACECOM, Colorado Springs, CO: 1997.
- Ferster, Warren. "U. S. Space Priorities Unveiled: Military Plan Could Require National Policy, Treaty Changes." Space News, April 13-19, 1998, 20.
- General Military Law. U.S. Code, Title 10--Armed Forces. secs. 151 - 164 (1994).
- Graves, Roger B. "The Concept of AORs and How AORs Relate to Space." Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997.
- Graves, Roger B. "Why Establish a Space Area of Responsibility (AOR) Now." Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997.
- Graves, Roger B. "Why Establishing an AOR for USCINCSpace Does Not Create a Seam Between Air and Space." Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997.
- Lambakis, Steven. "Exploiting Space Control: It's Time to More Fully Integrate Space into Warfighting Operations." Armed Forces Journal International, June 1997, 42.
- McDougall, Walter A. ...The Heavens and The Earth - A Political History of the Space Age. New York: Basic Books, 1985.
- Mehuron, Tamar A. "Space Almanac." Air Force Magazine, August 1997, 34.
- Moyer, Richard H. "Space as an Area of Responsibility (AOR)." Unpublished Point Paper, USSTRATCOM, Omaha, NE: 1997.
- RAND. Space Roles, Missions, and Functions: The Challenge of Organizational Reform. pm-382-CRMAF. 1995.
- Rich, Mark. "The Effect of a 6th AOR on Relationships and Responsibilities Among Regional CINCs." Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997.
- Scott, William B. "Pentagon Considers Space as a New Area of Responsibility." Aviation Week and Space Technology, March 24, 1997, 55.
- United States Air Force. Global Engagement: A Vision for the 21st Century Air Force. Washington, D. C.: 1997.

United States Air Force. Space Operations (Air Force Doctrine Document 2-2) Washington, D. C.: March 1998.

U. S. Department of Defense. Report of the Commission on Roles and Missions of the Armed Forces (CORM). Washington D. C.: 1995.

U. S. Joint Chiefs of Staff. Doctrine for Joint Operations (Joint Pub 3-0) Washington, D. C.: February 1, 1995.

U. S. Joint Chiefs of Staff. Unified Action Armed Forces (UNAAF) (Joint Pub 0-2) Washington, D. C.: February 24, 1995.

U. S. Joint Chiefs of Staff. Unified Command Plan (UCP) Washington, D. C.: February 9, 1998.

U. S. President. A National Security Strategy for a New Century (May 1997), 7.

U. S. Treaties. "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies," 10 October 1967. United States Treaties and Other International Agreements. TIAS 6347. (1967) v. 18, pt.3.

Vego, Milan. On Operational Art (2nd Draft). Newport, RI: 1998.

Veit, Rudy. "The Responsibilities of Regional and Functional CINCs." Unpublished Point Paper, USSPACECOM, Colorado Springs, CO: 1997.

White, John P. "Defense Organization Today." Joint Forces Quarterly, Autumn 1996, 19.